In the 09/08/2004 non-final Office Action, the examiner rejected claims 16-34 under 35 U.S.C. §101, asserting that the term "terminological information" is an abstract idea. The examiner also rejected claims 16-34 under 35 U.S.C. §112, para. 1, asserting that a §101 rejection necessitates a §112, para. 1. The examiner further rejected claim 16 under 35 U.S.C. §101 double patenting, asserting that claim 1 of the parent patent US 6,654,731 teaches each of the limitations of pending claim 16.

I. 35 U.S.C. §101 ABSTRACT IDEAS: CLAIMS 16-34

The examiner rejected claims 16-34 under 35 U.S.C. §101, asserting that "terminological information" is an abstract idea and Applicant's claims merely manipulate the abstract idea of "terminological information" without producing a useful, concrete, and tangible result.

Terminological information is not an abstract idea and the integrated knowledge base 180 results produced is a useful, concrete, and tangible result.

Terminological information may be though of as a vocabulary of technical terms used in a particular field, subset, science, or art. Being domain specific or topic specific (Spec. p.3, 1.9), terminological information 110 (FIG. 1) comprises multiple terms, as well as information that relates at least two terms. (Spec., p.6, 1.21-22). For example, terminological information may include the terms "hepatitis" and "blood diseases", and the information that "blood diseases" is a broader term than the term "hepatitis." (Spec., p.7, 1.1-3). In one embodiment, the input terminological information 110 (FIG. 1) consists of up to sixteen thesauri and the maximum length of a term is 80 characters. (Spec. p.24, 1.7-9)

The specification beginning at page 20, line 7 reads:

*The integration of user specified **terminological information** into a built-in knowledge base has application for use in specific domains. For example, an English language newspaper in India may buy a natural language processing system (e.g., Oracle.RTM. ConText.RTM.) to provide a search capability for their on-line edition. However, the newspaper agency may find that the built-in knowledge base has little or*

*no knowledge of Indian politics and economics. For this hypothetical, the user desires to extend the built-in knowledge base to include **terminological information** on Indian politics and economics. The built-in knowledge base (e.g., knowledge base 155) has a category for "politics", but all subcategories associated with this node apply generally to United States politics. For this hypothetical, the India newspaper may build a hierarchy of terms for "Indian politics" under the existing "politics" category in the knowledge base. Specifically, names of major Indian political parties and politicians are organized and represented in the ISO-2788 thesaurus format.*

The specification beginning at page 21, line 18 reads:

*The **terminological** system also has application for use to generate logical structures detached from any ontology in the built-in knowledge base. For example, a customer may desire to add some foreign language (e.g., Hindi) terms that are commonly used in "Indian English." The customer of the natural language processing system may decide that it is useful to keep the foreign language terms separate from the rest of the terminology used in the natural language processing system (i.e., perhaps because the new ontology will be treated differently in the NLP application). For this example, a customer may build a thesaurus of terms that do not have any hierarchical (BT/N) or related terms that link the input **terminological information** to existing terms in the knowledge base. For this example, the thesaurus compiler creates a new tree of terms and augments the built-in knowledge base to include an additional independent ontology.*

Several patents have issues that employ terminological information as part of the claim limitations. In addition to claims 4-7 and 11-14 of the parent patent U.S. 6,654,731 reciting the claim term "terminological information," the claims of United States patent US 5,471,392 (claims 1 and 13), German patent DE 4422391, and Japanese patent JP 3514264 recite the claim term "terminological information." Moreover, the term "terminological information" is utilized in the specifications of US 5,471,392, DE 4422391, JP 3514264, US 2002/0107683, and U.S. 6,654,731.

Thus, as recited in the claims, the term "terminological information" is not an abstract idea. The integration of terminological information 110, representing a vocabulary of technical terms used in a particular field, subset, science, or art, with a built-in knowledge base 155 by a computer through a variety of steps into an integrated knowledge base 180 constitutes a practical

application of those steps because it produces a useful, concrete, and tangible result (namely, integrated knowledge base 180).

For the above reasons, Applicant respectfully requests that the examiner withdraw the rejection to the claims.

II. 35 U.S.C. §112, PARA. 1: CLAIMS 16-34

The examiner rejected claims 16-34 under 35 U.S.C. §112, para. 1, asserting that a §101 rejection necessitates a §112, para. 1. The Examiner writes that when an Applicant has not in fact disclosed the practical application for the invention, as a matter of law there is no way Applicant could have disclosed how to practice the undisclosed practical application.

As noted above, the specification disclosed the practical application for the invention (e.g., an integrated knowledge database 180). Thus, as a matter of law, Applicant has in fact disclosed the practical application for the claimed invention. In addition, the claims are fully supported by the disclosure, Applicant provided an enabling disclosure of the claimed subject matter and provided an adequate written description of the invention, and disclosed the best mode of practicing the claimed invention.

In view of the above, Applicant respectfully requests that the examiner withdraw the rejection to the claims.

III. 35 U.S.C. §101 DOUBLE PATENTING: CLAIM 16

The examiner rejected claim 16 under 35 U.S.C. §101 double patenting, asserting that claim 1 of the parent patent US 6,654,731 teaches each of the limitations of pending claim 16. The examiner also writes that a statutory type (35 U.S.C. §101) double patenting rejection is overcome if the claims are not coextensive in scope.

Claim 16 recites that the received terminological information contains information that specifies "ontological relationships" among at least two input terms. Thus, the scope of claim 16

includes all explicit formal specifications of the relationships that hold among the input terms. The scope of claim 1 of US 6,654,731 in this context is limited to two explicit formal specifications of the relationships that hold among the input terms: linguistic relationships and semantic relationships. Thus, claim 16 and claim 1 of US 6,654,731 are not coextensive in scope. Accordingly, Applicant respectfully requests that the examiner withdraw the rejection to claim 16.
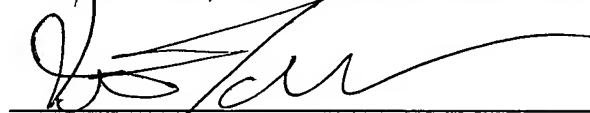
CONCLUSION

In view of the foregoing, it is submitted that all pending claims, namely claims 16-34, are in condition for allowance. Reconsideration of the rejections is requested. Allowance is earnestly solicited at the earliest possible date.

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